

REINFORCED ROD HOLDER

Field of the Invention

This invention is related to fishing and in particular to improved rod holders for use in fishing boats

Background of the Invention

Conventional rod holders are well known for their functionality in holding most any style fishing rod as well as cutting tables, down riggers, shore power cords, boat hooks, gaffs, and so forth. Rod holders provide organization within the cockpit of a boat and are especially useful by providing a securing holding area when a boat is moving.

There have been many improvements to rod holders over the years. Examples of previously known forms of holders are disclosed in U.S. Patent Numbers 1,448,808; 3,142,936; 3,902,816; 3,902,269; 3,964,706; 4,017,998; 4,062,299; 4,578,891, and 4,778,141. Most all known rod holders are secured to a transom of a boat by

the use of fasteners that must engage the boat for securement. For instance, the most typically fastener is a wood screw which requires that the mounting service is structurally sound.

The actual mounting service may be fiberglass, gel coat covered wood, plastic, aluminum and so forth.

In a typically wood based boat, the fastening screws

1 must be sealed to prevent water intrusion that could allow the
2 screw to back-out under pressure, or otherwise weaken the
3 support.

4 Further, even if the fastening screws are properly sealed,
5 the strength of the rod holder assembly is limited by the
6 strength of the mounting surface. For instance, some
7 production boats have a thin gunnel wall that is about 1/4 in
8 thickness and made of fiberglass. Should a large fish stike
9 bait held on the end of a fishing rod, the rod and rod holder
10 is at risk at being lost wherein a sharp pull could result in
11 catastrophic failure of the fastener. In such instance, the
12 use of a machine screw with enlarged washers may enhance the
13 strength of the assmby but is difficult to install and
14 requires two people if the cockpit is lined.

15 Rod holders on more expensive boats may include a teak
16 covering wherein the rod holder must be removed for periodic
17 refinishing of the teak. Removal and subsequent installation
18 can result in deformation of the screw heads and weakening of
19 the support structure.

20 Thus, what is lacking in the art is a rod holder that has
21 all fasteners concealed from the elements and can be used on
22 thin or otherwise structurally inept mounting surfaces.

23

1 Summary of the Invention

2 The fishing rod holder of the instant invention has an
3 upper flange securable to receiving a socket mounted beneath
4 the mounting surface by use of a backing plate. The backing
5 plate is slotted for accommodating mounting surfaces ranging
6 from 1/4 inch in thickness to an excess of 2" inches in
7 thickness, eliminating the need for any fastener to be exposed
8 to the elements and enhancing the appearance of the rod holder.

9 Thus an objective of the instant invention is to
10 incorporate a backing plate into a rod holder that allows for
11 structural strength on most any type of mounting surface.

12 Still another objective of the instant invention is to
13 include slots in a backing plate to allow for adjustment of the
14 rod holder for use on mounting surfaces having various
15 thicknesses.

16 Still another objective of the instant invention is to
17 disclose a rod holder having an improved appearance by
18 eliminating the use of any mounting mechanisms that can be
19 viewed from the cockpit area.

20 Still another objective of the instant invention is to
21 provide a rod holder wherein the receiving socket can be
22 permanently attached to a mounting surface whereby the upper
23 flange can be removed for cleaning or refinishing without

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1 disturbing the receiving socket.

2 Yet still another objective of the instant invention is to
3 disclose fastenless mounting for adaptation to striking rod
4 holders and rotatable butt holders.

5 Yet still another objective of the instant invention is
6 disclose a rod holder that is simple to manufacture by
7 eliminating the need for drilling and finishing of mounting
8 holes.

9 Other objectives and advantages of this invention will
10 become apparent from the following description taken in
11 conjunction with the accompanying drawings wherein are set
12 forth, by way of illustration and example, certain embodiments
13 of this invention. The drawings constitute a part of this
14 specification and include exemplary embodiments of the present
15 invention and illustrate various objects and features thereof.
16

1 BRIEF DESCRIPTION OF THE DRAWINGS

2 Figure 1 is a side view of the rod holder assembly in a
3 mounted position;

4 Figure 2 is a side view of the upper flange member;

5 Figure 3 is a front view of the receiving socket;

6 Figure 4 is a perspective view of the receiving socket;

7 Figure 5 is a cross sectional side view of the rod holder;

8 Figure 6 is a partially exploded side view of the rod
9 holder; and

10 Figure 7 is a perspective view of the upper flange member.

1 DETAILED DESCRIPTION

2 Although the invention will be described in terms of a
3 specific embodiment, it will be readily apparent to those
4 skilled in this art that various modifications, rearrangements
5 and substitutions can be made without departing from the spirit
6 of the invention. The scope of the invention is defined by the
7 claims appended hereto.

8 Referring now in general to the Figures, set forth is a
9 rod holder assembly 10 of the instant invention having an upper
10 flange 12 defined by a top surface 14 and a lower surface 16
11 with a centrally disposed aperture 18 therethrough. The upper
12 flange 12 operates as a coupling point employing at least one
13 securement boss 20, and preferably three securement bosses 20,
14 20' and 20", each having internal threads receptive to a
15 mechanical fastener such as a threaded bolt or machine screw.
16 The upper flange 12 is further defined by a parameter edge 22
17 which is spaced apart from the opening 18 effectively providing
18 a lip that engages the top of a mounting surface 25 and
19 distributes stress over a large area.

20 The top surface 14 of the upper flange 12 shows no visible
21 fasteners and can be highly polished. Unlike conventional rod
22 holders having exposed fastener holes which are difficult to
23 manufacture and require finishing, the instant invention has
24 all fasteners located beneath the flange.

1 A backing plate 30, emphasized in Figures 3 and 4,
2 includes a centrally disposed opening 32 which is aligned with
3 the centrally disposed opening 18 of the upper flange. The
4 backing plate 30 includes a perimeter edge 34 which
5 approximates the perimeter edge spacing of the upper flange to
6 provide equal opposing pressure plates. The backing plate 30
7 includes apertures 36 for use in the aligning of bosses 20 and
8 allowing for various mounting surface thicknesses. In the
9 preferred embodiment the backing plate 30 is coupled to the
10 receiving socket 40 by a weldment wherein the items are
11 integral. The receiving socket has an upper end 42 coupled to
12 the backing plate 30 and a lower end 42 depending therefrom.
13 The receiving socket is constructed and arranged to receive a
14 fishing pole handle that is inserted through the opening of the
15 upper flange, through the opening on the backing plate, and
16 through the opening on the upper end of the receiving socket.

17 Referring to Figure 4, the open end 32 of the receiving
18 socket is the same as the open end of the backing plate 30
19 wherein the embodiment illustrated depicts the backing plate
20 and receiving socket as a single piece item permanently
21 adjoined through a weldment of the two components. It should
22 be noted that the receiving socket and backing plate may also
23 be formed from a single piece casting, or coupled together by

1 a disengaging threaded coupling as an alternate embodiment.
2 The receiving socket 40 and backing plate 30 is coupled to the
3 upper flange 12 by use of fasteners 50 which pass through
4 slotted apertures 36 into the upper flange bosses 20. The
5 slotted apertures 36 are elongated to allow for a mounting
6 surface 25 ranging from about a quarter of an inch in thickness
7 to approximately two inches in thickness. The slots allow the
8 receiving socket to be aligned with the opening of the upper
9 flange, despite the mounting surface thickness, thereby
10 providing for a rod holder having a universal attachment.

11 The backing plate 30 and the upper flange 12 distribute
12 the load over a broad cross-section of the mounting member 25.
13 Unlike conventional rod holders, securement to a mounting
14 member 25 does not require an engagement directly to the
15 mounting member. The upper flange and the lower flange are
16 bolted together sandwiching the mounting member 25 there-
17 between.

18 Securement holes 52, clearly illustrated in Figures 3 and
19 4, allow for the permanent attachment of the backing plate and
20 receiving socket to the lower surface of the mounting member 25
21 by a threaded screw. In use the backing plate and receiving
22 socket may be installed in a permanent fashion allowing the
23 fixed placement of a drain pipe 54. Should the upper surface

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1 27 of the mounting member 25 need to be refinished or the upper
2 flange 12 be removed for any reason, the upper flange can be
3 removed without disturbing the position of the backing plate,
4 receiving socket or drain pipe. The mounting holes placed in
5 the mounting member, that is the gunnel, may have the exposed
6 sidewall sealed as no fastener is threaded into the mounting
7 member.

8 Figure 5 provides a cross-sectional side view of rod
9 holder assembly 10 having the upper flange 12 coupled to
10 backing plate 30 and receiving socket 40. Fasteners 50 engage
11 boss 20 of the upper flange 12. The cross-sectional view
12 depicts a liner 60 that extends from the upper flange into the
13 lower end 42 of the receiving socket. The liner 60 can be made
14 of most any material, including the conventional materials such
15 as vinyl or other plastic derivatives and is frictionally
16 secured by an engagement lip 62 to the upper flange. Removal
17 of the upper flange causes removal of the liner. The ability
18 to remove the liner is simplified as the flange 12 operates as
19 the holding tool, should the liner separate from the flange,
20 the liner extends above the mounting member surface 27 making
21 it easy to grasp without tools. The liner provides a
22 continuous sidewall concealing the exposed gunnel section and
23 preventing fishing rod handle marring during insertion and

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1 removal.

2 The receiving socket is preferably tubular shaped as
3 disclosed, however it also may be elongated or frusto conical
4 allowing the rod holder to be used in engaging a fish by quick
5 movement without removal from the rod holder assembly. In the
6 preferred embodiment the lower end 42 of the receiving socket
7 includes a stop member 66 having a conventional shape for use
8 in engaging the butt of a fishing rod handle. The handle butt
9 for a conventional fishing rod includes slots for engaging the
10 stop member to prevent rotation of the fishing pole. Further
11 shown in Figure 5 is the drain port 68 for use in draining rain
12 water or ocean spray that enters the receiving socket which is
13 preferably coupled to the aforementioned drain tube 54.

14 Figure 6 illustrates the rod holder assembly 10 with the
15 upper flange 12 partially removed together with liner 60. In
16 this illustration, bosses 20 are disengaged from the fastening
17 bolts, the mounting apertures 52 are engaged with mounting
18 screw 53 to maintain engagement plate and receiving socket in
19 a fixed position when the upper flange 12 has been disengaged.
20 In this embodiment, a rotating butt is located along the lower
21 end 42 of the receiving socket 40. Rotating butt stop members
22 are known in the industry and are preferred by many fisherman
23 to allow the fishing rod to rotate upon the strike of a large

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1 fish.

2 It is to be understood that while I have illustrated and
3 described certain forms of my invention, it is not to be
4 limited to the specific forms or arrangement of parts herein
5 described and shown. It will be apparent to those skilled in
6 the art that various changes may be made without departing from
7 the scope of the invention and the invention is not to be
8 considered limited to what is shown in the drawings and
9 described in the specification.

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